

IFW16

#### RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/743,107C

DATE: 08/23/2004 TIME: 11:14:52

Input Set : A:\003300-723.ST25.txt

```
Output Set: N:\CRF4\08232004\1743107C.raw
 4 <110> APPLICANT: Hanson, Lars A.
 5
        Baltzer, Lars
        Mattsby-Baltzer, Inger
       Dolphin, Gunnar T.
 9 <120> TITLE OF INVENTION: Peptides Based on the Sequence of Human Lactoferrin
10
   and Their Use
12 <130> FILE REFERENCE: 003300-723
14 <140> CURRENT APPLICATION NUMBER: US 09/743,107C
15 <141> CURRENT FILING DATE: 2001-08-21/
17 <150> PRIOR APPLICATION NUMBER: PCT/SE99/01230
18 <151> PRIOR FILING DATE: 2000-09-29
20 <150> PRIOR APPLICATION NUMBER: SE 9802441-7
21 <151> PRIOR FILING DATE: 1998-07-06
23 <150> PRIOR APPLICATION NUMBER: SE 9802562-0
24 <151> PRIOR FILING DATE: 1998-07-17
26 <150> PRIOR APPLICATION NUMBER: SE 9804614-7
27 <151> PRIOR FILING DATE: 1998-12-29
29 <160> NUMBER OF SEQ ID NOS: 102
31 <170> SOFTWARE: PatentIn version 2.1
33 <210> SEQ ID NO: 1
34 <211> LENGTH: 25
35 <212> TYPE: PRT
36 <213> ORGANISM: Artificial Sequence
38 <220> FEATURE:
39 <221> NAME/KEY: MOD RES
40 <222> LOCATION: (1)
                                                       41 <223> OTHER INFORMATION: ACETYLATION
43 <220> FEATURE:
44 <221> NAME/KEY: PEPTIDE
45 <222> LOCATION: (1)
46 <223> OTHER INFORMATION: Amino acid 1 is Xaa wherein Xaa = Glu or no amino acid.
48 <220> FEATURE:
49 <221> NAME/KEY: PEPTIDE
50 <222> LOCATION: (2)
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51 <223> OTHER INFORMATION: Amino acid 2 is Xaa wherein Xaa = Ala or no amino acid.

54 <221> NAME/KEY: PEPTIDE 55 <222> LOCATION: (5)

53 <220> FEATURE:

58 <220> FEATURE:

61 <223> OTHER INFORMATION: Amino acid 7 is Xaa wherein Xaa = Gln or Lys.

56 <223> OTHER INFORMATION: Amino acid 5 is Xaa wherein Xaa = Cys or Ala.

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### Input Set : A:\003300-723.ST25.txt Output Set: N:\CRF4\08232004\I743107C.raw 63 <220> FEATURE: 64 <221> NAME/KEY: PEPTIDE 65 <222> LOCATION: (11) 66 <223> OTHER INFORMATION: Amino acid 11 is Xaa wherein Xaa = Asn or Asp. 68 <220> FEATURE: 69 <221> NAME/KEY: PEPTIDE 70 <222> LOCATION: (17)..(25) 71 <223> OTHER INFORMATION: Amino acids 17-25 are Xaa wherein Xaa = Gly, Pro, Pro, 72 Val, Ser, 73 Cys, Ile, Lys, Arg 75 <220> FEATURE: 76 <221> NAME/KEY: MOD RES 77 <222> LOCATION: (25) 78 <223> OTHER INFORMATION: AMIDATION 80 <220> FEATURE: 81 <223> OTHER INFORMATION: Description of Artificial Sequence: of natural or artificial 83 origin, corresponding to modification of the sequence consisting of aa 16-40 in human lactoferrin 86 <400> SEQUENCE: 1 -> 88 Xaa Xaa Thr Lys Xaa Phe Xaa Trp Gln Arg Xaa Met Arg Lys Val Arg 89 1 5 W--> 91 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa 92 20 94 <210> SEQ ID NO: 2 95 <211> LENGTH: 25 96 <212> TYPE: PRT 97 <213> ORGANISM: Artificial Sequence 99 <220> FEATURE: 100 <221> NAME/KEY: MOD RES 101 <222> LOCATION: (1) 102 <223> OTHER INFORMATION: ACETYLATION 104 <220> FEATURE: 105 <221> NAME/KEY: MOD RES 106 <222> LOCATION: (25) 107 <223> OTHER INFORMATION: AMIDATION 109 <220> FEATURE: 110 <223> OTHER INFORMATION: Description of Artificial Sequence: of natural or 111 artificial origin, corresponding to a modification 112 of the sequence consisting of amino acids 16-40 in 113 human lactoferrin 115 <400> SEQUENCE: 2 116 Glu Ala Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg 117 119 Gly Pro Pro Val Ser Cys Ile Lys Arg 20 124 <210> SEQ ID NO: 3 125 <211> LENGTH: 25 126 <212> TYPE: PRT

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Output Set: N:\CRF4\08232004\I743107C.raw

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130 <221> NAME/KEY: MOD RES
131 <222> LOCATION: (1)
132 <223> OTHER INFORMATION: ACETYLATION
134 <220> FEATURE:
135 <221> NAME/KEY: MOD RES
136 <222> LOCATION: (25)
137 <223> OTHER INFORMATION: AMIDATION
139 <220> FEATURE:
140 <221> NAME/KEY: DISULFID
141 <222> LOCATION: (5)..(22)
143 <220> FEATURE:
144 <223> OTHER INFORMATION: Description of Artificial Sequence: of natural or
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          of the sequence consisting of amino acids 16-40 in
          human lactoferrin
149 <400> SEQUENCE: 3
150 Glu Ala Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg
                      5
153 Gly Pro Pro Val Ser Cys Ile Lys Arg
154
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158 <210> SEQ ID NO: 4
159 <211> LENGTH: 23
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161 <213> ORGANISM: Artificial Sequence
163 <220> FEATURE:
164 <221> NAME/KEY: MOD RES
165 <222> LOCATION: (1)
166 <223> OTHER INFORMATION: ACETYLATION
168 <220> FEATURE:
169 <221> NAME/KEY: MOD RES
170 <222> LOCATION: (23)..(23)
171 <223> OTHER INFORMATION: AMIDATION
173 <220> FEATURE:
174 <223> OTHER INFORMATION: Description of Artificial Sequence: of natural or
175
          artificial origin, corresponding to a modification
176
          of the sequence consisting of amino acids 18-40 in
177
          human lactoferrin
179 <400> SEQUENCE: 4
180 Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg Gly Pro
181
183 Pro Val Ser Cys Ile Lys Arg
184
188 <210> SEQ ID NO: 5
189 <211> LENGTH: 23
190 <212> TYPE: PRT
191 <213> ORGANISM: Artificial Sequence
193 <220> FEATURE:
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### RAW SEQUENCE LISTING DATE: 08/23/2004 PATENT APPLICATION: US/09/743,107C TIME: 11:14:52

Input Set : A:\003300-723.ST25.txt

Output Set: N:\CRF4\08232004\I743107C.raw

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195 <222> LOCATION: (1)
196 <223> OTHER INFORMATION: ACETYLATION
198 <220> FEATURE:
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200 <222> LOCATION: (23)
201 <223> OTHER INFORMATION: AMIDATION
203 <220> FEATURE:
204 <221> NAME/KEY: DISULFID
205 <222> LOCATION: (3)..(20)
207 <220> FEATURE:
208 <223> OTHER INFORMATION: Description of Artificial Sequence: of natural or
209
          artificial origin, corresponding to a modification
          of the sequence consisting of amino acids 18-40 in
211
          human lactoferrin
213 <400> SEQUENCE: 5
214 Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg Gly Pro
                                          10
217 Pro Val Ser Cys Ile Lys Arg
218
                 20
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223 <211> LENGTH: 14
224 <212> TYPE: PRT
225 <213> ORGANISM: Artificial Sequence
227 <220> FEATURE:
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229 <222> LOCATION: (1)
230 <223> OTHER INFORMATION: ACETYLATION
232 <220> FEATURE:
233 <221> NAME/KEY: MOD RES
234 <222> LOCATION: (14)
235 <223> OTHER INFORMATION: AMIDATION
237 <220> FEATURE:
238 <223> OTHER INFORMATION: Description of Artificial Sequence: of natural or
239
          artificial origin, corresponding to a modification
240
          of the sequence consisting of amino acids 18-31 in
241
          human lactoferrin
243 <400> SEQUENCE: 6
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249 <210> SEQ ID NO: 7
250 <211> LENGTH: 14
251 <212> TYPE: PRT
252 <213> ORGANISM: Artificial Sequence
254 <220> FEATURE:
255 <221> NAME/KEY: MOD RES
256 <222> LOCATION: (1)
257 <223> OTHER INFORMATION: ACETYLATION
259 <220> FEATURE:
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Input Set : A:\003300-723.ST25.txt

Output Set: N:\CRF4\08232004\I743107C.raw

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261 <222> LOCATION: (14)
262 <223> OTHER INFORMATION: AMIDATION
264 <220> FEATURE:
265 <221> NAME/KEY: BINDING
266 <222> LOCATION: (5)..(9)
267 <223> OTHER INFORMATION: LACTAM
269 <220> FEATURE:
270 <223> OTHER INFORMATION: Description of Artificial Sequence: of natural or
          artificial origin, corresponding to a modification
272
          of the sequence consisting of aa 18-31 in human
273
          lactoferrin; a lactam is formed between aa 5 and 9
275 <400> SEQUENCE: 7
276 Thr Lys Ala Phe Lys Trp Gln Arg Asp Met Arg Lys Val Arg
277
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282 <211> LENGTH: 20
283 <212> TYPE: PRT
284 <213> ORGANISM: Artificial Sequence
286 <220> FEATURE:
287 <223> OTHER INFORMATION: Description of Artificial Sequence: Peptide of
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          amino acids in positions 12-31 of the protein
289
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290
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293 Val Ser Gln Pro Glu Ala Thr Lys Cys Phe Gln Trp Gln Arg Asn Met
294
      1
296 Arg Lys Val Arg
297
301 <210> SEQ ID NO: 9
302 <211> LENGTH: 7
303 <212> TYPE: PRT
304 <213> ORGANISM: Artificial Sequence
306 <220> FEATURE:
307 <223> OTHER INFORMATION: Description of Artificial Sequence: Peptide of
308
          natural or artificial origin consisting of the
309
          amino acids in positions 12-18 of the protein
          human lactoferrin
310
312 <400> SEQUENCE: 9
313 Val Ser Gln Pro Glu Ala Thr
314
      1
318 <210> SEQ ID NO: 10
319 <211> LENGTH: 7
320 <212> TYPE: PRT
321 <213> ORGANISM: Artificial Sequence
323 <220> FEATURE:
324 <223> OTHER INFORMATION: Description of Artificial Sequence: Peptide of
325
          natural or artificial origin consisting of the
          amino acids in positions 13-19 of the protein
326
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RAW SEQUENCE LISTING ERROR SUMMARY PATENT APPLICATION: US/09/743,107C DATE: 08/23/2004 TIME: 11:14:53

Input Set : A:\003300-723.ST25.txt

Output Set: N:\CRF4\08232004\I743107C.raw

### Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 1,2,5,7,11,10,16,20,21,22,28,24,25 Seq#:43; Xaa Pos. 2,4,6,10

Seq#:87; Xaa Pos. 5

Seq#:88; Xaa Pos. 5

Seq#:89; Xaa Pos. 7

Seq#:90; Xaa Pos. 7

Seq#:99; Xaa Pos. 3,4,5,6,7,8,9

#### VERIFICATION SUMMARY

DATE: 08/23/2004 PATENT APPLICATION: US/09/743,107C TIME: 11:14:53

Input Set : A:\003300-723.ST25.txt

Output Set: N:\CRF4\08232004\1743107C.raw

 $L\!:\!88~M\!:\!341~W\!:$  (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0  $L\!:\!91$   $M\!:\!341$   $W\!:$  (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:16 L:906 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:0 L:1276 M:259 W: Allowed number of lines exceeded, <223> Other Information: L:1304 M:259 W: Allowed number of lines exceeded, <223> Other Information: L:1811 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:87 after pos.:0 L:1834 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:88 after pos.:0 L:1857 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:89 after pos.:0 L:1880 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:90 after pos.:0 L:2109 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:99 after pos.:0